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LASER PHOTOACOUSTIC TECHNIQUE FOR NDE.(U)
OCT 81 R L THOMAS

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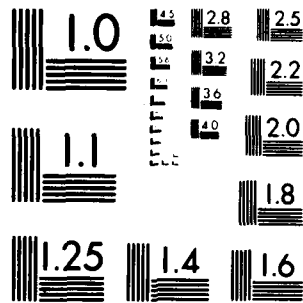
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Figure 1



MICROCOPY RESOLUTION TEST CHART
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18. KEY WORDS (Continue on reverse side if necessary and identify by block number) Laser photoacoustic technique in the non-destructive evaluation (NDE) of ceramics and metals.		
19. ABSTRACT (Continue on reverse side if necessary and identify by block number) The physics of the scanning photoacoustic microscopy (SPAM) has been developed. SPAM has been applied to NDE problems in high performance ceramics, and has been shown to be potentially useful for NDE in other solids, such as metals and semiconductors.		

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USE OF ACOUSTIC TECHNIQUE FOR THE

FINAL REPORT

R. L. THOMAS

OCTOBER 26, 1981

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[illegible]

2. A detailed experimental and theoretical investigation of the physics of the generation and scattering which is responsible for the SPW's.
3. The use of several kinds of simple fabricated subsurface flaws.
4. The application of the SPW technique to various materials problems and
5. The detection of subsurface flaws at depths ranging from
about one millimeter to about one millimeter and with lateral resolution of about
one millimeter subsurface flaws.

As a result of these studies have been sufficiently encouraging that the Federal Government and one U.S. Army Laboratory have adopted the technology and at least one major scientific conference (IEEE Ultrasonics) now devotes a special session to this topic. Technical details of the procedures are given in the following list of publications, Part C of this

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STUDY OF THE EFFECTS OF THE POLYMERIZATION OF VINYL MONOMERS ON THE POLYMERIZATION OF VINYL MONOMERS

S. aureus strains were isolated from 115 livestock and 106 wild birds.
The authors thank Dr. J. L. Thomas and D.F. Fleming, A.I. for
their assistance.

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[illegible]

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U.S. Patent Office, "Computer-Driven Hardware", L.I. Industrial
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the changes $\delta(\mathbf{r}, t)$ of $\mathbf{S}(\mathbf{r}, t)$ and $\mathbf{I}(\mathbf{r}, t)$ are given by the following equations (see, e.g., [1, 2]):

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